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THE NATIONAL TRIBUNE.

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BYRON ANDREWS.

WASHINGTON, D. C., OCTOBER 28, 1897.

846

is the number of this issue of THE NATIONAL TRIBUNE. Every subscriber should compare this with the number on the yellow address slip containing his name. If that number is 847, he has only one paper more coming to him. If 848, he will have two, and so on. He will do us a favor by watching these closely, so as to know when his subscription expires, that he may renew in time, and it will be to his interest, for there are so many valuable serials now running through the paper that he will feel he cannot afford to miss a number.

We ask everyone, therefore, to look at once at the address slip on his paper, and see how near it comes to 846.

As the European papers begin to understand the firm temper of Minister Woodford's letter to the Spanish Ministry a notable change is seen in the utterances of the more influential. There is no increase of good will toward this country, but there rises before their eyes the perennial terror of a general war. Spain must be given to understand that she will be treated as Greece was, and not allowed to precipitate a European struggle. If she will fight she must fight alone, for if one Nation attempts to help her, there is no assurance that the others will consent to stand aloof, and then, they shudder at the thought. The result will be that this tone will grow more imperative every day, and Spain will be forced to surrender, with nothing more than a torrent of Castilian gasconade to relieve her wounded feelings. She will not be allowed to disturb the peace of Europe in a useless attempt to retain her hold upon an island that she has so grossly misgoverned.

The laugh over the ridiculous talk about Austria coming to the assistance of Spain is emphasized by a disgraceful free fight which occurred in the Austrian Lower House last week among the representatives of the jarring races which make up the Kingdom. Germans, Poles, Bohemians, Croats, etc., belabored one another with rulers, inkstands, desk-covers, and other weapons, until they were themselves out fighting. Austria has all that she can do to prevent herself from going to pieces from race conflicts that every day grow in bitterness.

The tone of the German papers for the past week or two has been that Spain has lost Cuba, and that she has deserved to do so, though the United States has not been altogether blameless.

HANNIS TAYLOR, for the last four years Minister to Madrid, is preparing an important communication to the American people, in which he will say that the Spanish politicians are utterly incapable of solving the Cuban problem, and that the end is sure. He will outline a plan by which the independence of Cuba can be secured without war.

The man who served his country honorably during the war has a vested right to any form of public employment for which he may be capable, such as no other man has or can possibly gain.

Is it not the depth of meanness to endeavor to save money for the Treasury by withholding pensions until the claimants are dead and beyond the reach of payment?

The only honest way of treating a debt is to pay it when it is due, without reference to how much money it may take.

OUR FREE BOOKS TO EVERY SUBSCRIBER.

So many old subscribers have indicated their disappointment at the withdrawal of "The Cannoneer" and "Capturing a Locomotive" that we have printed and bound new editions of both books, and they will be found in our offer this week on the eighth page.

This list on the eighth page is very attractive—there is not the equal of it anywhere. It makes club-raising easy.

Large as is the circulation of this paper—your paper—it ought to be doubled. We are doing our part by sacrificing all present profits in the way of premiums.

Are you doing your part in the way of club-raising?

STATE FLAGS ON SCHOOL-HOUSES.

As a reply to the work that the Grand Army of the Republic is doing toward hoisting the flag over the school-houses, the Grand Camp of Confederate veterans urges the hoisting of the State flag over each school-house in the South. The only objection to this is to the animus, and not to the fact. We want every child taught to love and honor his or her State, which is the local embodiment of justice, freedom, law and order. They ought in the same way to love and honor their County and town. If the child is taught respect and affection for the State, the same sentiments are engendered for that which is greater than any State—the United States. A State flag is a good and beautiful thing—in its place. That place is strictly subordinate to the National standard. Like every other good thing, the State flag became a very bad thing when it was out of its place—when it attempted to arrogate supremacy to the National flag. It will be very edifying and proper to hoist the Palmetto flag over the school-houses of South Carolina, for example, if the Star Spangled Banner is hoisted first, and the lads and lassies are taught that the National flag is as superior to the other as the other is to the flag of the City of Charleston.

But if only one flag is to be hoisted, and that the State flag, and the children are to be taught that to it is due their highest allegiance, a criminally audacious effort will be made to turn back the wheels of progress, and unlearn a lesson taught in fire and blood and measureless human misery. No reprobation can be too severe for men who in the full light of the last decade of the 19th century deliberately set out to teach the rising generation the wicked fallacies which plunged a peaceful country into a bloody war 36 years ago.

"OLD IRONSIDES."

Last Thursday was a celebration at Boston which must have sent a thrill of patriotism to the heart of every American. It was that of the centennial of the launching of the glorious old frigate "Constitution," which made the most splendid history of any single vessel that ever sailed the seas.

The successful termination of the Revolution had left us free and independent, indeed, but we had gained but little more. We had scarcely gained as much of a place among the Nations of the earth as is occupied by Venezuela or Peru to-day. We certainly did not have as much interest for the rest of the world as have Mexico, Chile or the Argentine Confederation. We had gained our independence as Cuba will gain hers—more through the blunders and incompetence of our enemy than our own ability and resources. Good as some of our fighting had been, it had scarcely been such as to command as much attention from the soldiers and politicians of the world as has been given that of the Boers against the British.

The wisdom of Washington, Hamilton, Adams and other Federals saw the need of a naval force, though this was bitterly disputed by a school of politicians.

There were Mugwumps and peace-at-any-price men in those days, in even larger proportion than to-day. The great question was whether we should fight the Dey of Algiers, or pay him a tribute, as the rest of the world was doing, to bribe him to refrain from capturing our merchant vessels and reducing their crews to slavery.

After much heated discussion a bill was finally passed in 1794, providing for the construction of six frigates, but the Peace provision was strong enough to force a provision in the bill appropriating \$1,000,000, with which to buy off the Dey of Algiers, and also to suspend the building of the ships if the Dey should accept the offer. In 1795 the Dey agreed to let our ships alone upon the condition that we pay him \$800,000 in cash, present him with a frigate worth \$100,000, and thereafter pay him \$25,000 a year. This is a phase of our his-

tory which popular orators and writers have been careful to refrain from alluding to. The treaty was ratified, and the building of the ships suspended.

We had scarcely gotten the Dey off our hands, when the insolent French Directory came down upon us for a similar tribute as the price of leaving our ships alone. The peace-at-any-price fellows were strongly for paying the sum demanded, but the people had gotten tired of that sort of thing, and in 1797 President Adams succeeded in getting a small appropriation to enable him to complete the six ships, fortify some of the harbors, and make other provisions for war.

The first of these, and the first vessel of the United States Navy—the "United States," 44 guns—was launched at Philadelphia, July 10, 1797. She was followed by the "Constitution," 38 guns, launched at Baltimore, Sept. 10, 1787, and the "Constitution," 44 guns, launched at Boston, Oct. 21.

War was declared with France July 9, 1798, and there was business at once for the infant navy. The "Constitution" was the only one actually engaged, and she was fortunate enough to bring one much larger French ship to battle and capture her, and to defeat another still larger, which only escaped capture by accident. The "Constitution" had to wait for her turn till the war broke out with Great Britain in 1812. She was then commanded by the famous Capt. Isaac Hull, and her first exploit was to escape from an overpowering British fleet by handiness and good seamanship. She sailed away in search of something nearer her size, but did not succeed in finding it until Aug. 19, 1812, when off the Nova Scotia coast she came up with the British frigate "Guerriere," which showed every disposition to accommodate her. In fact, the commanders of both ships had been eagerly looking for each other ever since the beginning of the war. The "Constitution," without firing a shot, ran up to within half-pistol shot of her antagonist, and opened a fire so terrible that in 15 minutes all of the "Guerriere's" masts and rigging had been shot away, her crew frightfully cut up and she was in a sinking condition. She surrendered, her crew were removed to the "Constitution," and she sank.

The effect all over the world was electric. Our people were enormously elated, and the British correspondingly humiliated and angered. The London Times, then, as now, the leading paper in Great Britain, said:

"We have been accused of sentiments unworthy of Englishmen because we described what we saw and felt on the occasion of the capture of the 'Guerriere.' We witnessed the gloom which that event cast over high and honorable minds; we participated in the vexation and regret, and it is the first time that we have ever heard that the striking of the English flag on the high seas is anything like an equal force should be regarded by Englishmen with complacency and satisfaction. It is not merely that an English frigate has been taken after we are free to confess may be called a brave resistance, but it has been taken by a new enemy, an enemy unaccustomed to such triumphs, and likely to be rendered insolent and confident by them."

The "Constitution" was immediately sent to sea again under the command of Capt. Bainbridge. Dec. 26, 1812, she came up with the Java off the coast of Brazil, a ship carrying four more guns and a much larger crew. After a fierce fight of two hours the Java was reduced to a wreck, which was set on fire after her crew was taken off. Out of 446 men she had 65 killed and 175 wounded. The Constitution lost only 9 killed and 25 wounded.

On Feb. 20, 1815, the "Constitution," then under command of Commodore Charles Stewart, came up with two British men-of-war off the Portuguese coast, and immediately attacked them. After a sharp battle she succeeded in capturing both. They proved to be the "Cyane," 36 guns and 185 men, and the "Levant," 21 guns and 130 men. The "Constitution" lost 3 killed and 12 wounded, while the enemy's loss was 77 killed and wounded.

The world was astonished at these achievements, as well as at those of other American frigates. Great Britain had been for many years the acknowledged

mistress of the seas. She had fought every other Nation that sailed the seas, and had always whipped. It was the customary thing to see Dutch, French, Spanish and Danish and Russian flags go down before her walls of oak, whether they were borne by single ships or fleets. In the previous 20 years her frigates had fought over 200 single-ship duels with frigates of opposing Nations, and had lost but five out of 200. Yet every time a British ship came up with an American of anything like her strength she was promptly blown out of water, with appalling loss of life, while the American suffered but little.

Many explanations have been given, but the probably correct one is to be found in the character of the crews. The English ships were manned by the scum of the ports, gathered in by the press-gangs, while the American crews were composed of hardy New England fishermen, who were the finest sailors in the world. They could sail their ship all around a British vessel, and when they were at the guns they shot to hit.

The astonishing victories of the Constitution and her sister ships, and the equally astonishing victory at New Orleans, had the most beneficial effects in developing the American spirit. They drew the whole people together in bonds of common pride, and gave the young Nation a standing and importance in the eyes of the world such as nothing else could have done.

THE LUTERTER TRIAL.

The most sensational murder trial of the present decade concluded in Chicago last week with the disagreement of the jury. There is little doubt in the minds of sensible men who have studied the case that Lutertger killed his wife and disposed of her in the manner and form charged in the indictment, yet few expected that the jury would agree upon a verdict, though the State presented its evidence in a very skillful and convincing way.

The facts are that Adolph L. Lutertger, an extensive sausage manufacturer of Chicago, had been living on bad terms with his wife for many years, and had made very savage threats against her. She disappeared from home on the night of May 1, last, and has not been seen since. That night Lutertger spent alone in the vat-room of his sausage-factory. He had steam gotten up under one of the vats during the day, and a strong lye made, under the pretext that he was going to make up a quantity of soft soap, to clean up the vat, so as to sell it. The next day he had the vat-room thoroughly cleaned.

In the sediment in the vat the State found two gold rings marked "L. L.," some fragments of bone, a tooth, etc. It claimed that Lutertger had, after killing his wife, boiled her body to nothingness in the lye. It was demonstrated that this could be done by entirely dissolving the body in a solution of hot caustic potash, a body taken from the morgue.

The main legal interest centered around the interpretation that should be placed upon the term "corpus delicti." The English and American courts have always held that in order to prove a murder the State must produce the body of the murdered person. The question then became how much of the body must be produced, and the answer has been enough to make the identification with the murdered person beyond a doubt.

For example, a mate was quarreling with a sailor on the fore part of the ship one dark, stormy night. The mate came aft cursing, picked up a hatchet, and went forward again. The sailor was never seen again, but there was a quantity of blood and other traces found on the deck where he had been. The courts held that this did not constitute a corpus delicti. In the celebrated Webster-Parkman case the artificial teeth were accepted as the corpus delicti, and the murderer hanged. The Judge charged the jury that a corpus delicti was necessary to conviction, but this did not require the absolute production of the body of the alleged deceased, but the production of such legal evidence as proves beyond a doubt that the murder was committed in the manner charged in the indictment.

The jury remained out 38 hours, but failed to agree, nine steadily voting for conviction and three for acquittal. The State at once gave notice for a new trial. This can be done in Illinois and in some other States. It is held that when once a man has been on trial to the extent of impeding a jury he has been "put in jeopardy," in the meaning of the Constitution, and cannot be tried again.

The trial has probably cost Cook County about \$30,000.

Personal Reminiscences of an Army Cook.
The War Viewed from the Rear.

I tell you, our Regimental Surgeon was a boss doctor. He didn't lay under the thumb of no dem, no matter what Regiment they belonged to. He could give a Latin name for long eye ache for no-e-bless, and vacinate you in three languages. My, how much that man knowed! He'd ensue de flip Majah, and de odder ossifers in Latin and Greek sometimes, soze not tuh break de regulations, and it was jest orful. I wonder de did not wither dem, and make their hair fall out.

He vuz mighty cute, too, wid all his learnin'. At first de boys 'ud go on him bad. Dey'd go up tuh him at sick call and play sick and show him their tongues, and git excused from duty. He'd gib dem some powder or pills, which dey'd frow away jest ez soon ez dey wuz out ob sight. I done seed him one day walkin' afor er path through de brush leadin' tuh his tent, which de ground vuz white wid de papers dey'd throw away. He vuz a regular 'dynamo'! I knowed dey'd kech it. De next dey I watched, and see dem come up agin. He'd say:

"Don't feel well, eh? Pains in your breast and stomach? Couldn't sleep for dem last night? Don't feel able tuh go on drill or do any work between meals? Lem me see your tongue. Yes; jest ez I supposed. Attack ob de shirkibus, dead-beatibus malaria. It's very bad in camp now. Steward, gib dis man two ounces of castor oil, an' see dat he takes it on de spot. He mustn't go no longer withoutt. We must arres de disease at once."

De sick-call fell off in popularity de very next day after he begun dat.

What I didn't like 'bout de Surgeon wuz dat he wuz a demagogue. He 'ud come tuh de boys and say, "I've got a new medicine. When de boys wuz kinkin' 'bout wormy hardtack an' pork he wanted tuh gib 'em all doses tuh improve der appetite. When one ob our fellows ran away from a fight he had him brought tuh his tent de next day, an' he'd gib him a wid tincture ob iron, tuh brace up his nerve."

I wuz mosely 'round Headquarters one day, while Mistah Jo wuz still in de yard-house on account ob dat Chaplain business, when I overheard de Surgeon takin' tuh de Capt. Under the tree.

"One ob de very best men in de regiment," de Kunnel, he say, "I'd no' let him kikker alone. I declar' if he'd knowed tuh do."

"L. L. hab hold ob him an' try tuh cure him," sez de Surgeon. "I hab an idea I kin do it. I believe I kin gib him some likker mixed with samfin tuh make him sick, an' 'till turn him agin it so he'll nebbber want anudder drink ez long ez he's in de army."

"Well, you kin take him an' try it," sez de Kunnel, tired-like, though I hairet no faith in it. But I wuz tuh try anything, tuh I'm very fond ob dat man, in spite ob his cuttin'-up."

"He's bin in yard-house so long now dat he must be jest burnin' up fur a drink ob whiskey. I jest heared de Majah axin' de Adjutant for a drink tuh set up his tent, an' fix it in good shape fur tuh receive some ladies who is comin' tuh camp dis afternoon. I'll fix up a bottle ob whiskey wid imekak an' sum under things an' sneak it in de Majah's traps. Den you tell de Adjutant tuh send dis man an' sum odders round de yard-house tuh pick up de Majah's tent. He'll drink tuh dat whiskey, sho's yo're born—he'll find it, if it wuz forty feet underground!" de rest'll be all right."

"Very good, Surgeon," sez de Kunnel, an' gib de orders tuh de Adjutant.

I done lay in de squad when it come outen de yard-house, an' I whispered in Mistah Jo's ear:

"Don't yo' dat' tech dat whiskey yo' find in de flip Majah's tent. It's done loaded for you."

Mistah Jo wink his eye, an' he whispered back:

"I kech on, but it's powerful hard. I wants some whiskey now wusser'n I do de Ten Commandments."

"Well, jest let dat alone, an' I'll steal some for you from de Commissary an' hab it fob yo' when yo' need it most."

Mistah Jo done ez I tole him, an' paid no more 'tenshin tuh de whiskey bottle dan if it had a b'n a tent peg. When he come down tuh de mess I had a tincup ob commissary tuh him—jest enuff to set him up, an' not enuff tuh make a fob of him. Den I tole him wuz I'd overheard an' we all sot out tuh watch de flip Majah. He wuz in his tent, shavin' an' puttin' on his best coloe tuh meet de ladies. Jest ez he had finished his eye fell ob de bottle of whiskey.

"Well, I declar', sez he, 'I done forgot I had de hatchet. An' I wuz jest wantin' some de wuzt wuz, tuh brighten me up fur de ladies. I'm a little offen my feed lately. Snowball (I wuz hangin' 'round' watchin' so's tuh tell de boys) bring me some fresh wateh, in a hurry, yuh break imp."

I ran fur de water, an' de flip Majah he took a very stiff bow an' jest at dat moment de ladies rid in, an' I held der horses while de flip Majah helped dem off. Dey wuz F. F. V. who lived two or three miles fob de camp.

Ladies, sez he, "permit an ossifer ob de army ob de United States tuh welcome yo' tuh his rude abode. It's not such a place by any means, but yo're beauty an' breedin'—a palace wude last! It's de best he has. Your grace an' beauty, howsoever, will make it seem like a palace."

"O Majah," tittered one ob dem, "how polite and d'wery is your language. If de odder Yankees wuz like you."

"I shall be proud tuh introduce yo' tuh some of my brother ossifers, who'll be here presently," sez he, bowin' very low, "an' I reckon yo'll spend a very pleasant hour wid me."

Wid dat I see him gulp an' git pale 'bout de girls.

"Ladies," sez he, "walk in an' take seats. I feel dat my tent is honored ez nebbber has bin, by yo' presence."

"Majah, I'm afeard yo' re not feelin' well," sez one ob de ladies. "You look very pale."

"I've had a great deal on my mind," sez he, tryin' tuh hold on tuh himself; "camping plans are very perplexin', an' I've a great deal of thinkin' tuh do fob de funeral, who relies on me whenever he's in a tight place."

I wonder dat he didn't choke him. Jest den de Adjutant and Quartermaster come in.

"Ladies," sez de flip Majah, "I've tuh introduce tuh yo' two gallant sons of Mars, who—uh—uh—uh," an' he clapped his hand tuh his mouf an' ran outen de tent.

De Majah must hab got some of his big words crowsed in his froat," sez de Adjutant, lookin' arter him, an' de ladies dey tittered some more.

De rest ob us got 'round' when we could see de flip Majah tryin' tuh frow up his immortal soul.

"Majah, yo' seem onwell," sez Mistah Jo, gibin' de bidin' tuh de ladies an' his head.

"O Jo," groaned de Majah; "git de Surgeon, quick. I know I am pizened. Some enemy ob de country has pizened me, thinkin' I'm from my appearance. I wuz Jeneral McClellan or Jeneral Halleck. Run fur de Surgeon ez quick ez yo' kin. What'll be come ob de country if I die?"

TRIBUNETS.

Life: Pat-Bogorra, Meike, it's meself es thinks it's hard work gittin' up this hill on a wheel.

Mike-Indade it is. Jist stop a minnit, won't yez, while Oi spit on me fate.

Harper's Bazar: "Well, prisoner," said the Judge, "if you have anything to say, the court will hear you."

"I'd rather be excused, your honor," replied the prisoner. "If I said what I'd like to say I'd be committed for contempt of court, and I've got trouble enough without that."

Harper's Bazar: The new village minister was making a round of calls on his bicycle among the farmers belonging to his church and living in the outlying country districts.

As he wheeled into one door-yard his parishioner came out to greet him with extended, and exclaimed, as his pastor dismounted: "Why don't you get one of them tainters, so your wife can ride?"

Life: "By George, Mrs. Monger must be telling our wives the most awful scandal," "What makes you think so?" "Why, they are both listening without interrupting."

The best mechanics believe that the chain will stay on the bicycle, and never be superseded by the bevel-gearing. The gearing requires too careful adjustment to make it practicable for every-day rough usage, such as the chain must stand.

They are now proposing to cast steel in *vacuo*, in order to avoid the air-bubbles that prove so disastrous in great guns and similar costly and important metal productions.

Pretty soon the Weather Bureau will be trying to convince us that there are no such things as "Squaw Winter" or "Indian Summer," and that suckers don't run when the dogwoods bloom.

An inmate of the Maine Soldiers' Home has been caught smuggling in whiskey concealed in his wooden leg. He certainly didn't learn that trick in the army.

The attorneys of Sausagemaker Lutertger were at first undecided whether to prove that Mrs. Lutertger had boiled herself in the potash vat, or had been seized with the Klondike fever, and skipped out through the Chilokot Pass.

There is one place in the country which is not troubled with smoking chimneys. That is Key West. There is not a chimney in the city.

The great increase in the number of bridal couples in Washington is the surest sign of the return of prosperity. As a rule, people only get married when times are good, and there have been mighty few bridal couples around Washington for the last four years. Now they run a dead heat with the office-seekers in point of numbers.

We are a very impressionable people. The butchers, restaurant-keepers, hotel-stand bosses report an enormous falling off in the demand for sausages since the beginning of the Lutertger trial. Of course, no one believes that sausagemakers generally are addicted to the practice of boiling up their old and objectionable wives, but all the same he concludes he won't eat any sausage to-day.

New York Weekly: Awkward Miss, with umbrella—Bez pard on, sir.

Polite gentleman—Don't mention it. I have still one eye left.

PUZZLES AND QUERIES.

Some Problems Which are Really Worth While Working Out.

In place of a puzzle column which only contains "brain-rackers," involving ingenuity, patience and research, without producing anything of real interest and value in the end, we present puzzling problems in science and natural history, which involve actual, valuable and practical knowledge, and which, when worked out, will add to the worker's store of information on the working of Nature's great laws.

Answers to these should be designated by number, as we number them consecutively, and give the answers in future issues, and also the names of the most successful solvers.

Answers to the Puzzles and Queries published in the issue of Oct. 14 have been received from several readers. Stanton Park, Atchison, Kan., answered correctly Nos. 2, 3, and 6. S. W. Staloch, Oakland, Md., answered correctly No. 3. A. Maiden, Mass., reader showed considerable research; he answered correctly Nos. 4, 5, and 9, but in Nos. 7 and 8 gave illustrations instead of principles.

Here are the correct answers:

1. The most extensive view possible from sea-level is at the pole. This is the result of the flattening of the earth at the poles causing the horizon to be remote.
2. A ball dropped into a well extending through the earth to the antipodes will vibrate back and forth from one side to the other, with a gradually shortening path, and finally come to rest at the center of gravity, which may be the center of the earth but is not necessarily so. Were the hole a vacuum, the ball would continue its movement indefinitely.
3. The twentieth century will begin with Jan. 1, 1901.
4. Cocoa is *Erythroxylon coca*, a South American shrubby plant the leaves of commerce. Cocoa leaves are used as a stimulant by the Indians. They yield the drug cocaine. Cocoa is *Theobroma cacao*, the fruits of which are the source of both chocolate and cacao. The cocoa nut is *Cocos nucifera*, a palm tree growing in tropical countries near sea-level. It yields the well-known coconuts.
5. Quinine is an alkaloid extracted from the bark of the cinchona tree (*Cinchona calypso*, *Cinchona lara*, *Cinchona jara*). The bark itself was formerly largely used as a drug under the name of "Fervent bark."
6. Celluloid is a mixture of low strated gun cottons (collodion cotton) with camphor.
7. Heat is necessary for the conversion of a liquid into a vapor or gas, as is well known in the case of water and every other common liquid. When a substance which is fusible at ordinary temperatures, such as ammonia (ordinary ammonia is a solution of the true ammonia in water) is made liquid by pressure it becomes hot, and when it is decomposed having been converted into heat. If now the liquid so formed is allowed to cool to the ordinary temperature and then allowed to suddenly expand, it takes up a heat necessary for its conversion into gas from surrounding objects. If the vessel in which it is contained and allowed to expand be surrounded by water, the water is heated, and the heat necessary for its conversion into steam is taken from the water and the machine is an "alternator"; that is, it de-

livers a current alternately in one direction or the other. The number of alternations may be a few hundred per minute or many thousands. 3. In the case of the dynamo, the armature is usually excited by distillation with steam. In the case of fatty oils, such as linseed oil, the method nowadays is to soak the seed in naphtha. The naphtha dissolves the oil or fat, just as water does sugar. The mixed naphtha and fat is then drawn off into tanks, and the naphtha distilled off, leaving the fat or oil in the still.

10. The reason for believing the earth has a metallic core is that while the rocks and other substances composing the exterior layer as far as man has been able to reach, are not more than 25 times as heavy as an equal bulk of water on the average, yet the weight of the globe as a whole is more than five times that of a sphere of water of the same size. Hence there must be materials much heavier than ordinary rock in the interior of the globe, and these materials can hardly be anything else than metals. The earth is very highly magnetic, and this is a further proof that it is a great mass.

Additional Puzzles and Queries.

21. What is the difference between "amperage" and "volts"?
22. What is the difference between an arc light and an incandescent light?
23. What is meant by "65 gear" as applied to bicycles?
24. What year immediately preceded 1 A. D.?
25. What is the difference in time between two points lying one mile east and west apart from one another in the city of Minneapolis, which is approximately on the 45th parallel?
26. Why should bodies weigh less at the equator than at the poles?
27. If a gun pointed at a train traveling 50 miles an hour were fired to the rear, with a charge of powder normally sufficient to give a velocity of 50 miles an hour to the shot, what would happen?
28. What happens to limestone when it is burnt in a lime-kiln?
29. Why should canning preserve meat?
30. What is the principle upon which the rotary cream separators work?

PERSONAL.

Wm. Wirt Howe, of New Orleans, La., who was elected President of the American Bar Association at its recent meeting at Cleveland, O., served as Major of the 4th U. S. C. Cav. After the war he went to New Orleans and entered upon the practice of the law. From 1893 to 1895 he served as one of the Judges of the Supreme Court of Louisiana, and made a high reputation by the soundness of his decisions and the pity forcefulness of his expression. He is now the head of the law firm of Howe, Spencer & Locke, of New Orleans, one of the foremost law firms of the South.

There was quite a social event at Mt. Vernon, O., Oct. 20, in the marriage of Hurd Alexander, youngest son of Col. Alexander Cassil, to Miss Mabel Gladys Pratt, one of the belles of the city. Col. Cassil served in the 65th Ohio, one of the very best regiments in the army.